

From: [ANDERSON Jim M](#)
To: [Eric Blischke/R10/USEPA/US@EPA](#); [Chip Humphrey/R10/USEPA/US@EPA](#)
Cc: [MCCLINCY Matt](#)
Subject: RE: Background Meeting Summary
Date: 05/05/2008 08:37 AM

Eric,
I looked over my notes from our 5/1 mtg & you captured everything in your 5/2 e-mail. Thanks, these summaries really help.
Jim

-----Original Message-----

From: Blischke.Eric@epamail.epa.gov
[mailto:Blischke.Eric@epamail.epa.gov]
Sent: Friday, May 02, 2008 5:00 PM
To: Shephard.Burt@epamail.epa.gov; Humphrey.Chip@epamail.epa.gov; Davoli.Dana@epamail.epa.gov; GAINER Tom; Grepo-Grove.Gina@epamail.epa.gov; PETERSON Jenn L; jeremy_buck@fws.gov; ANDERSON Jim M; Goulet.Joe@epamail.epa.gov; Smith.Judy@epamail.epa.gov; Koch.Kristine@epamail.epa.gov; MCCLINCY Matt; howp@critfc.org; POULSEN Mike; Fuentes.Rene@epamail.epa.gov; Robert.Neely@noaa.gov; Sheldrake.Sea@epamail.epa.gov; tomd@ctsi.nsn.us; csmith@parametrix.com; rgensemer@parametrix.com; rose@yakama.com; erin.madden@gmail.com; jay.field@noaa.gov; Cora.Lori@epamail.epa.gov; Ader.Mark@epamail.epa.gov; BBarquin@hk-law.com; audiehuber@ctuir.com; Lisa.Bluelake@grandronde.org; sheila@ridolfi.com; Benjamin Shorr; LavelleJM@cdm.com; Mary.Baker@noaa.gov; Michael.Karnosh@grandronde.org; FARRER David G; dallen@stratu
jpeers@stratusconsulting.com; (b) (6); Bob Dexter; cunninghame@gorge.net; JMalek@parametrix.com; Madalinski.Kelly@epamail.epa.gov
Subject: Background Meeting Summary

Below is a summary of our meeting on background that took place on May 1, 2008.

Data Selection:

We agreed to include TZW as a matrix for background levels will be developed. The LWG will be consulting literature information to develop background estimates for chemicals such as manganese, barium and arsenic dissolving out of native materials under reducing conditions.

Agreed RM 16 would be considered background for surface water vs. RM 11/RM 16.

Data Quality: A concern about older data with elevated detection limits (e.g., 10 - 40 ppb for PCBs) was raised as a key data quality concern.

Data Processing:

Treatment of Replicates: This was discussed. It was generally agreed that we should not be eliminating results (i.e., the replicate) or biasing the data set (i.e., counting replicates twice). The best approach is to average the replicates. It was agreed that a summary of the broader data rules would be developed and that the data rules for the HHRA and ERA should generally be consistent.

Calculation of Analyte Totals: Again, it was agreed that a summary of the broader data rules would be developed and that the data rules for the HHRA and ERA should generally be consistent.

Identification of Outliers: The discussion focused on a strict application of statistical tools to identify outliers or to apply best professional judgement. It was agreed that statistical tests to identify outliers would be performed. Outliers would be evaluated to determine whether they should be included in the background data set. Further discussion on this topic is required. A list of factors to be considered in determining when to include or exclude outliers will be developed by a focused technical team and recommended to managers (see below).

Non-detect Value Substitution: It was agreed that a non-detect substitution based on the Helsel 2005 guidance will be performed. Further discussion by a focused technical team is required to work out the specifics.

Use of Processed Data Set:

Organic Carbon and/or grain size normalization of data. It was agreed that organic carbon normalization was appropriate for some chemicals. However there was a lot of discussion about how to apply this. The LWG stated that they would consider grain size normalization for some chemicals such as metals. Further technical discussion internally is required before going back to the LWG.

PRGs. There was a lot of discussion about the development of PRGs. The primary issue was what metric should be used to determine if two distributions were similar. It was agreed that it was not appropriate to compare a single value against a single value. However, because the upriver and site data sets will likely have different distributions, it is unclear whether the comparison metric should be the UCL of the mean, the UCL of the distribution or some other metric. It was decided that ProUCL 4.0 and other EPA guidance on background comparisons would be

consulted. Also, further discussion internally is required to consult on the approaches conducted at other sites (e.g., LDW and Upper Columbia River) and their applicability to PH.

Risk: It was agreed that the value to be used in the RI and Risk Characterization is the 95% UCL on the mean.

Hilltopping: There was a lot of discussion about hilltopping focusing on the replacement values. Nothing was resolved. Further discussion is required.

Baseline: There was a discussion of whether baseline is an appropriate replacement value. This ties into the hilltopping discussion above. Further discussion required.

Other Issues: These were not discussed at length. There was either general agreement on what was presented or the issue was tied up in some of the earlier discussions (e.g., PRG development).

Next Steps: Need to resolve issues related to the RI and Risk Assessment by June 1, 2008. RI and Risk issues primarily focus on:

Non-Detect Substitution
Identification of Outliers
Organic-carbon normalization
Data sets for background (e.g, what is to be included for each matrix)

A technical meeting was scheduled for Friday, May 9th. Technical representatives include Mike Poulsen, Bob Dexter and Burt Shephard. The goal of the technical meeting is to develop recommendations on each of the four issues identified above. A follow-up meeting with the site managers to present/discuss the recommendations has been scheduled for May 14, 2008.

Discussion on Hilltopping and PRG development will likely take place after June 1, 2008